

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/840,174 | 05/05/2004 | Hannu Moilanen | 5054-8PCON | 7490 |
| 27799 7590 05/21/2007 COHEN, PONTANI, LIEBERMAN & PAVANE 551 FIFTH AVENUE | | | EXAMINER | |
| | | | TRAN, HENRY N | |
| SUITE 1210 NEW YORK, NY 10176 | | ART UNIT | PAPER NUMBER | |
| | | | 2629 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | • | | 05/21/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|--|---|--|--|--|--|
| | 10/840,174 | MOILANEN ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Henry N. Tran | 2629 | | | | |
| The MAILING DATE of this communication app | 1 | e correspondence address | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATI 36(a). In no event, however, may a reply be vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDO | ON. be timely filed om the mailing date of this communication. NED (35 U.S.C. § 133). | | | | |
| Status | | · | | | | |
| 1) Responsive to communication(s) filed on 23 Fe | ebruary 2007. | | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ This | This action is FINAL . 2b) ☐ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, | 453 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) <u>1,3-9 and 11-18</u> is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1,4-6,8,9,12-14 and 16</u> is/are rejected to 7) ⊠ Claim(s) <u>3,7,11,15,17 and 18</u> is/are objected to 8) □ Claim(s) are subject to restriction and/or | vn from consideration. | | | | | |
| Application Papers | | , | | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | epted or b) objected to by the drawing(s) be held in abeyance. Sion is required if the drawing(s) is | See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) 🔲 Interview Summ | ary (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4/23/06. | Paper No(s)/Mai 5) Notice of Informa 6) Other: | Date | | | | |

Application/Control Number: 10/840,174 Page 2

Art Unit: 2629

DETAILED ACTION

1. This office action is in response to applicants' amendment and remarks received on February 23, 2007. Claims 1, 3-9, and 11-18 are pending. Claims 2 and 10 are canceled; claims 1 and 3-9 are amended; and claims 17 and 18 are new. Applicants' amendments the specification and the claims, and the remarks have been fully considered with the results set forth as follows.

Response to Arguments

- 2. Applicants' amendments to the specification have overcome the objections to the specification recited in item 2 of page 2 of the prior Office action mailed 11/20/06.
- 3. Applicants' arguments with respect to claims 1, 4-6, 8, 9, 12-14, and 16 have been considered but are most in view of the new grounds of rejection discussed follows.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

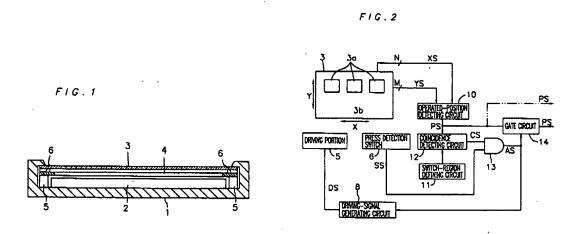
A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al (U.S. Patent No. 6,118,435, hereinafter referred to as referred to as "Fujita").

Fujita, Figs. 1 and 2, teaches an electronic device for a dynamic user interface for generating user detectable multi-functional feedback with a single component in response to a stimulus signal, the electronic device including a housing (1), a display (2), and electronic

Art Unit: 2629

circuitry (3) located in the housing, the improvement comprising: a lens (3) covering the display, the lens having a transparent area placed over the display, see col. 5, lines 18-20; force sensors (6) attached to the lens for detecting a touch against the lens, the force sensors producing a stimulus signal (SS) in response to the touch; at least one resonating vibrating element (5) attached to an area of said lens extending outside of the display, see col. 5, lines 57-65; said single component comprising the lens (3) and the at least one resonating vibrating element, the at least one resonating vibrating element (5) being operable to produce at least two feedback signals selected from a group consisting of a haptic feedback signal, a vibratory alert signal, an audio signal, and a buzzer signal, see col. 5, line 66 to col. 6, lines 20; and an electrical drive circuit (8) electrically coupled to said at least one resonating vibrating element (8) for electrically driving said at least one resonating vibrating element with a drive signal (DS) based on the stimulus signal (SS), see Fig. 2.



Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 10/840,174

Art Unit: 2629

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 4

7. Claims 4-6, 8, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita in view of Goldenberg (U.S. Patent No. 5,245,245).

Fujita teaches generally all except for the use of the resonating vibrating element operable as an acceleration sensor, a piezo-bender of one of a unimorph, or a bimorph, or a multilayer structure, which comprises an external mass attached to said piezo-bender; and the electronic device or the dynamic user interface is a hand-held electronic device. Goldenberg teaches a dynamic user interface, which is a hand-held electronic device (100) comprising a resonating vibrating element (a vibrator) operable as an acceleration sensor, a piezo-bender of one of a unimorph, or a bimorph, or a multilayer structure, which comprises an external mass (404) attached to said piezo-bender, see Figs. 1-5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the above identified teachings of Goldenberg for the Fujita resonating vibrating element because this would provide a smaller, more portable, and reliable electronic device that uses a low-profile and reliable vibrator for providing the enhanced functionality and reliability of the electronic device, see Goldenberg, col. 1, lines 11-30.

Art Unit: 2629

Claims 4-6, 8, 12-14, and 16 are dependent upon the bases claims 1 and 9; and are therefore rejected on the same reasons set forth in claims 1 and 9, and by the reasons discussed above.

Allowable Subject Matter

8. Claims 3, 7, 11, 15, 17, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/840,174 Page 6

Art Unit: 2629

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry N. Tran whose telephone number is 571-272-7760. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Henry N Tran Primary Examiner

Henry N. Tom

Art Unit 2629

HT 5/15/07